

**II. Rejection under 35 U.S.C. § 103(a)**

The Examiner has rejected all pending claims under § 103(a) as obvious over Rondeau et al. in view of Casperson et al. and further in view of Aaslyng et al. Applicant respectfully traverses this rejection.

The presently rejected claims recite a composition for the dyeing of keratinous fibers comprising, in a medium suitable for dyeing, at least one cationic direct dye chosen from compounds of formula (I), (II), (III), (III'), and (IV) and at least one quaternary ammonium salt chosen from compounds of formula (V), (VI), and (VII). According to the Examiner, Rondeau teaches a composition comprising at least one of cationic dye formula (I), (II), (III), and (III'). Office Action at 2-3. While the Examiner notes that Rondeau discloses the use of a quaternary polyammonium compound, namely Celquat® SC-240, the Examiner notably admits that "[t]he instant claims differ from the reference by reciting a dyeing composition comprising specific species of quaternary ammonium compounds and oxidizing agents such as enzymes." *Id.* at 4.

In an attempt to overcome this deficiency, the Examiner resorts to Casperson and Aaslyng. In particular, the Examiner alleges that Casperson teaches a hair dyeing composition comprising quaternary ammonium salts. *Id.* Furthermore, the Examiner alleges that Aaslyng "teaches . . . a hair dyeing composition comprising [a] laccase enzyme as an oxidizing agent." *Id.* The Examiner then concludes that a person of ordinary skill in the art would have been motivated to modify and combine the teachings of Rondeau, Casperson, and Aaslyng with a reasonable expectation of

successfully deriving Applicant's invention. Applicant respectfully disagrees and takes the position that the Examiner has failed to establish a *prima facie* case of obviousness.

**A. The Examiner has not met his Evidentiary Burden for Proving a *Prima Facie* Case**

To establish a *prima facie* case of obviousness, the Examiner must meet three basic criteria as set forth in M.P.E.P. §2143. First, there must be a suggestion or motivation to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success in making such a modification or combination. And third, the prior art must teach or suggest all the claim limitations. In this case, the Examiner fails to present "substantial evidence" on any of these three requirements, as required by the current case law. *In re Zurko*, 258 F.3d 1379, 1384 (Fed. Cir. 2001).

Specifically, and as the Examiner knows, the standards for proving a *prima facie* case of obviousness are high. Alleging obviousness based on a supposedly similar utility and applicability is simply insufficient. Indeed, M.P.E.P. § 2142 states: "The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." (emphasis added).

The Federal Circuit, moreover, requires that the record contain "substantial evidence" to support the determination of obviousness. *In re Zurko*, 258 F.3d at 1386. In this regard, "[t]he factual inquiry whether to combine references must be thorough and searching. It must be based on objective evidence of record . . . . Thus the [PTO] must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the

agency's conclusion." *In re Lee*, 277 F.3d 1338, 1343-44 (Fed. Cir. 2002) (quotation marks omitted, emphasis added). This the Examiner has failed to do.

Instead, the Examiner has asserted, without substantial evidentiary support, that a person of ordinary skill in the art would be motivated to combine Rondeau, Casperson, and Aaslyng with a reasonable expectation of success. Such unsubstantiated assertions do not meet the threshold for *prima facie* obviousness. Thus if the Examiner continues to maintain this rejection, Applicant urges him to clearly and specifically "explain the reasoning by which the findings are deemed to support [his] conclusion." *Id.* at 1344.

**B. The Examiner has not Shown any Motivation to Combine the References**

By his failure to provide sufficient evidence to support a *prima facie* case of obviousness, the Examiner has failed to meet the basic criteria set forth in M.P.E.P. §2143 and listed above. First, the Examiner has failed to show any suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the references. In addition to being "substantial," the evidence supporting an Examiner's allegation that one of ordinary skill in the art would have been motivated to combine reference teachings must be "clear and particular." *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (abrogated on other grounds by *In re Gartside*, 203 F.3d 1305 (Fed. Cir. 2000)). No "clear and particular" evidence has been presented here.

The primary reference, Rondeau, teaches oxidation dyeing compositions comprising three compounds: (1) at least one oxidation base; (2) at least one cationic

direct dye chosen from compounds of formula (I), (II), (III), and (III'); and (3) at least one oxidizing agent. Rondeau at col. 2, ll. 7-14. Rondeau, moreover, lauds these oxidation dyeing compositions as "rich with glints and [having] good endurance." *Id.* The reference simply does not suggest any deficiencies inherent in its compositions, or that one of skill in the art would wish to modify it. As a result, one of ordinary skill in the art would have had no motivation to isolate one of the three compounds disclosed, *i.e.*, the cationic direct dye, in order to combine it with any other compound, *i.e.*, quaternary ammonium salts, which themselves have been isolated from a larger composition.

Casperson likewise fails to teach or suggest modifying the contents of its disclosure. Casperson teaches a two-part system comprising multiple components for the oxidation dyeing of hair, including a monomeric quaternary ammonium cationic surfactant. Casperson at col. 3-4. Casperson describes his composition as stable and with enough consistency to remain on the hair during dyeing without dripping or running. *Id.* at col. 10, ll. 51-63. Like Rondeau, Casperson does not disclose any deficiencies inherent in its compositions. Accordingly, a person of ordinary skill in the art would not have been motivated to isolate that particular compound. Further, even if, for the sake of argument, one of ordinary skill would have been motivated to isolate that single compound, she would certainly not have been motivated to *combine* that compound with the cationic direct dye from Rondeau. In other words, the Examiner has failed to show any modicum of motivation to pick one compound from one reference, haphazardly isolated from the composition in which it is disclosed, and combine that compound with a second randomly-chosen compound, again isolated from the composition in which it is disclosed.

In an attempt to find some suggestion of a motivation to combine the references, the Examiner states that "Casperson teaches that quaternary ammonium salts are used in dyeing composition as hair conditioners since under the conditions employed for hair coloring they tend to neutralize the anionic charge normally present on the keratin of human hair." Office Action at 4-5. Applicant submits that the Examiner has misunderstood what constitutes a motivation to combine. Mere recitation of an alleged function of a single compound in one reference falls considerably short of providing an explicit motive to select and combine that single compound with another specific compound in a second reference, particularly where the second reference does not describe a deficiency. *Cf. In re Dembiczak*, 175 F.3d at 999-1000.

Likewise, the teachings of Aaslyng do not supply the requisite suggestion of a motivation to combine. Aaslyng teaches a permanent dyeing composition for keratinous fibers, such as hair, "comprising an oxidation enzyme . . . derived from a strain of the genus *Scytalidium*, [ ] one or more dye precursors, and optionally [ ] one or more modifiers." Aaslyng at 3, ll. 21-27. Like the other two references, Aaslyng fails to teach or suggest the combination of the cationic direct dye plucked from Rondeau with the quaternary ammonium salt plucked from Casperson. Aaslyng is cited apparently only to reject the present dependent claims drawn to enzymatic oxidizing agents. The Examiner states: "Aaslyng teaches that enzymes are useful for human hair when used as oxidizing agents." Office Action at 5. Yet this only illustrates a *teaching away* from Rondeau and Casperson, which specifically teach only peroxide (*i.e.*, non-enzymatic) oxidizing systems.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

In sum, taken either individually or together, not one of Rondeau, Casperson, or Aaslyng teaches or suggests a motivation to combine their teachings, particularly to combine selected teachings taken out of context of each patent as a whole. And in making his evaluation of the references, the Examiner must read and understand each reference as whole. M.P.E.P. § 2141.02; *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548 (Fed. Cir. 1983). Thus, the Examiner must consider the entire disclosures of Rondeau, Casperson, and Aaslyng, including those portions suggesting no further modification of their disclosure.

**C. The Examiner has not Shown a Reasonable Expectation of Success**

In addition to showing a motivation to combine the asserted references, the Examiner must provide a justification regarding why a person of ordinary skill in the art would have had a reasonable expectation of success when combining the references. M.P.E.P. § 2143.02. This expectation of success is particularly relevant in the art of hair dyes, which is notoriously unpredictable. See, e.g., CHARLES ZVIAK, THE SCIENCE OF HAIR CARE 271-273 (Charles vZviak ed., 1986). Here, the Examiner has failed to point to any reasonable expectation of success, largely for the same reasons discussed above regarding the lack of motivation to combine references.

Further contradicting any argument of likely success is that in taking the cationic direct dye out of Rondeau and the quaternary ammonium salt out of Casperson and calling their combination an obvious one, the Examiner is ignoring at least one compound essential to both Rondeau's and Casperson's compositions: the oxidation base. The Examiner would have the person of ordinary skill pluck the individual components out of each reference and leave behind the required ingredients with which

they are combined to make an inventive composition in each case. When one considers other factors, such as the fact that Casperson discloses the quaternary ammonium salt only as a conditioner and surfactant for its rheological properties; and nowhere teaches or suggests that the quaternary ammonium salt may have any effect on the dyeing action itself, the expectation of success becomes even more tenuous. Thus it is highly implausible that one of ordinary skill in the art would have had any expectation of success after having potentially removed an essential compound or having utilized one compound for a completely different, and indeed unexpected, purpose. "Rejecting patents solely by finding prior art corollaries for the claimed elements would permit the Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an illogical and inappropriate process by which to determine patentability." *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998) (citations omitted).

Accordingly, in view of the above, Applicant respectfully requests that the rejection under 35 U.S.C. §103 be withdrawn.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

III. Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and further examination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

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By: Thalia V. Warnement  
Thalia V. Warnement  
Reg. No. 39,064

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com